

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

CLAIMS

What is claimed is:

1. (Currently Amended) A method comprising:
 - receiving from multiple application programs executing within one or more computer environments, instructions intended for one or more target computer-based devices, said instructions being issued by the application programs in high-level, non-target device specific formats interpretable by a software communication portal receiving said instructions at least one high-level request regarding at least one designated device of a plurality of devices from at least one application program;
 - translating, at the software communication portal, said instructions from the high-level, non-target device specific formats to target device specific formats appropriate for software drivers associated with respective ones of the target computer-based devices for which said instructions were intended and according to target computer-based device information specified in the instructions; ~~the at least one high-level request to at least one low-level request;~~ and
 - communicating the instructions as formatted in the target device specific formats from the software communication portal to each of the software drivers as appropriate according to the target computer-based device information specified in the instructions. ~~at least one low-level request to at least one device driver associated with at least one device.~~
2. (Currently Amended) The method of claim 1 further comprising:
 - receiving at least one low-level message from at least one of the target computer-based devices ~~device;~~ and
 - translating the at least one low-level message to at least one high-level message;
 - and

forwarding the at least one high-level message to the at least one application program that sent the at least one of the instructions in high-level, non-target device specific formats request.

3. (Currently Amended) The method of claim 1 wherein the at least one of the instructions request comprises at least one of a status request and a control request.
4. (Currently Amended) The method of claim 1 wherein receiving the instructions request is achieved via one of /proc file system, ioctl, system call and direct function call.
5. (Currently Amended) The method of claim 1 further comprising:
regularly gathering a plurality of statistics regarding the one or more target computer-based devices ~~plurality of devices~~.
6. (Currently Amended) The method of claim 5 further comprising:
periodically forwarding a high-level message reporting the plurality of statistics regarding the one or more target computer-based devices ~~plurality of devices~~ to the at least one application program.
7. (Currently Amended) The method of claim 5 further comprising:
determining which of the one or more target computer-based devices ~~plurality of devices~~ issued errors that exceed a threshold number of errors based on evaluation of the plurality of statistics; and
sending shut-down messages to each of the one or more target computer-based devices ~~those of the plurality of devices~~ that issued errors that exceed a threshold number of errors.
8. (Currently Amended) The method of claim 5 further comprising:
retrieving a plurality of configuration information from a primary device of the one or more target computer-based devices ~~plurality of devices~~; and
applying the configuration information to a secondary device when the primary device is taken off-line.

9 - 14. (Canceled)

15. (Currently Amended) A machine readable medium having stored thereon instructions which when executed by a processor cause a machine to perform operations comprising:

receiving from multiple application programs executing within one or more computer environments, instructions intended for one or more target computer-based devices, said instructions being issued by the application programs in high-level, non-target device specific formats interpretable by a software communication portal receiving said instructions at least one high-level request regarding at least one designated device of a plurality of devices from at least one application program;

translating, at the software communication portal, said instructions from the high-level, non-target device specific formats to target device specific formats appropriate for software drivers associated with respective ones of the target computer-based devices for which said instructions were intended and according to target computer-based device information specified in the instructions; the at least one high-level request to at least one low-level request; and

communicating the instructions as formatted in the target device specific formats from the software communication portal to each of the software drivers as appropriate according to the target computer-based device information specified in the instructions.
~~at least one low-level request to at least one device driver associated with at least one device.~~

16. (Currently Amended) The machine readable medium of claim 15, wherein the instructions cause the machine to perform operations further comprising:

receiving at least one low-level message from at least one of the target computer-based devices device;

translating the at least one low-level message to at least one high-level message;
and

forwarding the at least one high-level message to the at least one application program that sent the at least one of the instructions in high-level, non-target device specific formats request.

17. (Currently Amended) The machine readable medium of claim 15 wherein the at least one of the instructions request comprises at least one of a status request and a control request.

18. (Currently Amended) The machine readable medium of claim 15, wherein the instructions caused the machine to perform operations further comprising:
regularly gathering a plurality of statistics regarding the one or more target computer-based devices ~~plurality of devices~~.

19. (Currently Amended) The machine readable medium of claim 18, wherein the instructions cause the machine to perform operations further comprising:
periodically forwarding a high-level message reporting the plurality of statistics regarding the one or more target computer-based devices ~~plurality of devices~~ to the at least one application program.

20. (Currently Amended) The machine readable medium of claim ~~18~~ 15, wherein the instructions cause the machine to perform operations further comprising:
determining which of the one or more target computer-based devices ~~plurality of devices~~ issued errors that exceed a threshold number of errors based on evaluation of the plurality of statistics; and
sending shut-down messages to each of the one or more target computer-based devices ~~those of the plurality of devices~~ that issued errors that exceed a threshold number of errors.

21. (Currently Amended) The machine readable medium of claim ~~18~~ 15, wherein the instructions cause the machine to perform operations further comprising:
retrieving a plurality of configuration information from a primary device of the one or more target computer-based devices ~~plurality of devices~~; and
applying the configuration information to a secondary device when the primary device is taken off-line.

22. (Currently Amended) A method comprising:
receiving from multiple application programs executing within one or more computer environments, instructions intended for one or more class of target computer-

based devices, said instructions being issued by the application programs in high-level, non-target device specific formats interpretable by a software communication portal receiving said instructions a high-level request regarding a class of devices from an application program;

translating, at the software communication portal, said instructions from the high-level, non-target device specific formats to target device specific formats appropriate for software drivers associated with respective ones of the class of target computer-based devices for which said instructions were intended and according to the target computer-based device information specified in the instructions; ~~the high-level request into a least one low-level request; and~~

communicating the instructions as formatted in target device specific formats from the software communication portal to each of the software drivers as appropriate according to the target computer-based device information specified in the instructions. at least one low-level request to each of a plurality of devices in the class of devices via at least one device driver associated with the plurality of devices.

23. (Currently Amended) The method of claim 22 further comprising:

receiving at least one low-level message from at least one of the target computer-based devices device;

preparing at least one instructions in the target device specific format low-level request to other target computer-based devices responsive to the at least one low-level message;

receiving a group of low-level messages from at least one of the target computer-based devices those of the plurality of devices that received the instructions in the target device specific format low-level request;

processing the group of low-level messages to create a single high-level message;
and

forwarding the single high-level message to the application program.

24. (Original) The method of claim 22 wherein the class of devices comprise a group of digital subscriber line (DSL) devices.

25. (Original) The method of claim 24 wherein the group of DSL devices comprise at least two of a DSL modem, a Digital Signal Processor (DSP) device, a plain old telephone system (POTS) device, a synchronous optical network (SONET) hardware, an E1 device, a T3 device, T1 hardware, an asynchronous transfer mode (ATM) device, a very high speed DSL (VDSL) device, and a Gigabit Ethernet device.

26. (Currently Amended) A method comprising:

providing a multiplexor, including

a high-level interface to receive from multiple application programs executing within one or more computer environments, instructions intended for one or more target computer-based devices, said instructions being issued by the application programs in high-level, non-target device specific formats ~~a plurality of high level requests from at least one application program~~, and

a low-level interface to receive a plurality of low-level messages from software drives associated with one or more target computer-based devices ~~a plurality of device drivers for the plurality of devices~~;

the multiplexor configured to

translate said instructions from the high level, non-target device specific formats to a first group of instructions in target device specific formats appropriate for the software drivers associated with respective ones of the target computer-based devices for which said instructions were intended and according to target computer-based device information specified in the instructions ~~the high level requests to a first group of low-level requests of a plurality of low level requests~~;

communicate the ~~low-level requests~~ instructions as formatted in the target device specific formats ~~to at least one~~ each of the device drivers as appropriate according to the target computer-based device information specified in the instructions;

translate the low-level messages to at least one high-level message; and

forward the high-level message to at least one application program.

27. (Currently Amended) The method of claim 26 wherein the multiplexor is further configured to:

translate the low-level messages to a second group of instructions in target device specific formats ~~low-level requests~~.

28. (Original) The method of claim 26 wherein the devices are a plurality of digital subscriber line (DSL) devices.